1. (Amended) A method for enhancing the photosynthesis of horticultural crops which comprises applying to the surface of said horticultural crop an effective amount of one or more highly reflective particulate materials, said particulate materials being finely divided, and wherein the particles as applied allow for the exchange of gases on the surface of said crop and the finely divided particulate materials have a median individual particle size below about 3 microns.

5. (Amended) The method of claim 1 wherein the particulate material has a particle size distribution wherein up to 90% by weight of the particles have a particle size of under about 10 microns.

12. (Amended) The method of claim [1] 15 wherein the finely divided particulate materials have a median individual particle size below about 3 microns.

Please add the following new claims.

17. (Added) A method for enhancing the photosynthesis of horticultural crops which comprises applying to the surface of said horticultural crop an effective amount of one or more highly reflective particulate materials, said particulate materials being finely divided, and wherein the particles as applied allow for the exchange of gases on the surface of said crop and the particles have a Block Brightness of at least about 90.

18. (Added) The method of claim 17 wherein said particulate materials are hydrophobic.

19. (Added) The method of claim 17 wherein said particulate materials are hydrophilic.

20. (Added) The method of claim 17 wherein the particulate material has a particle size distribution wherein up to 90% by weight of the particles have a particle size of under about 10 microns.

21. (Added) The method of claim 17 wherein the particulate material comprises a hydrophilic core and a hydrophobic outer surface.

22. (Added) The method of claim 21 wherein said hydrophilic core materials are selected from the group consisting of calcium carbonate, mica, kaolin, bentonite, clays, pyrophyllite, silica, feldspar, sand, quartz, chalk, limestone, diatomaceous earth, baryte, aluminum trihydrate, titanium dioxide and mixtures thereof.

23. (Added) The method of claim 19 wherein said hydrophilic materials are selected from the group consisting of calcium carbonate, talc, hydrous kaolin, calcined kaolin, bentonites, clays, pyrophyllite, silica, feldspar, sand, quartz, chalk, limestone, precipitated calcium carbonate, diatomaceous earth, barytes, aluminum trihydrate, pyrogenic silica, titanium dioxide and mixtures thereof.

24. (Added) The method of claim 21 wherein said hydrophobic outer surface materials are selected from the group consisting of organic titanates, organic zirconate or aluminate coupling agents, organofunctional silanes, modified silicone fluids and fatty acids and salts thereof.

25. (Added) The method of claim 17 wherein the horticultural crop is selected from the group consisting of fruits, vegetables, trees, flowers, grasses, roots, seeds and landscape and ornamental plants.

26. (Added) The method of claim 17 wherein the finely divided particulate materials have a median individual particle size below about 3 microns.

27. (Added) The method of claim 21 wherein the hydrophilic core particulate materials are selected from the group consisting of calcium carbonate, calcined kaolin and mixtures thereof.

28. (Added) The method of claim 19 wherein the hydrophilic particulate materials are selected from the group consisting of calcium carbonate, calcined kaolin and mixtures thereof.

29. (Added) A method for enhancing the photosynthesis of horticultural crops which comprises applying to the surface of said horticultural crop an effective amount of one or more highly reflective particulate materials, said particulate materials being finely divided, and wherein the particles as applied allow for the exchange of gases on the surface of said crop and the particulate materials are hydrophobic.

30. (Added) The method according to claim 29 wherein said particles have a Block Brightness of at least about 90.

31. (Added) The method of claim 29 wherein the particulate material has a particle size distribution wherein up to 90% by weight of the particles have a particle size of under about 10 microns.

32. (Added) The method of claim 29 wherein the particulate material comprises a hydrophilic core and a hydrophobic outer surface.

33. (Added) The method of claim 32 wherein said hydrophilic core materials are selected from the group consisting of calcium carbonate, mica, kaolin, bentonite, clays, pyrophyllite, silica, feldspar, sand, quartz, chalk, limestone, diatomaceous earth, baryte, aluminum trihydrate, titanium dioxide and mixtures thereof.

34. (Added) The method of claim 32 wherein said hydrophobic outer surface materials are selected from the group consisting of organic titanates, organic zirconate or aluminate coupling agents, organofunctional silanes, modified silicone fluids and fatty acids and salts thereof.

35. (Added) The method of claim 29 wherein the horticultural crop is selected from the group consisting of fruits, vegetables, trees, flowers, grasses, roots, seeds and landscape and ornamental plants.

36. (Added) The method of claim 29 wherein the finely divided particulate materials have a median individual particle size below about 3 microns.

37. (Added) The method of claim 32 wherein the hydrophilic core particulate materials are selected from the group consisting of calcium carbonate, calcined kaolin and mixtures thereof.

38. (Added) A method for enhancing the photosynthesis of horticultural crops which comprises applying to the surface of said horticultural crop an effective amount of one or more highly reflective particulate materials, said particulate materials being finely divided, and wherein the particles as applied allow for the exchange of gases on the surface of said crop and the particulate materials have a particle size distribution wherein up to 90% by weight of the particles have a particle size of under about 10 microns.

39. (Added) The method of claim 38 wherein said particulate materials are hydrophobic.

40. (Added) The method of claim 38 wherein said particulate materials are hydrophilic.

41. (Added) The method of claim 38 wherein the particulate material comprises a hydrophilic core and a hydrophobic outer surface.

42. (Added) The method of claim 41 wherein said hydrophilic core materials are selected from the group consisting of calcium carbonate, mica, kaolin, bentonite, clays, pyrophyllite, silica, feldspar, sand, quartz, chalk, limestone, diatomaceous earth, baryte, aluminum trihydrate, titanium dioxide and mixtures thereof.

43. (Added) The method of claim 40 wherein said hydrophilic materials are selected from the group consisting of calcium carbonate, talc, hydrous kaolin, calcined kaolin, bentonites, clays, pyrophyllite, silica, feldspar, sand, quartz, chalk, limestone, precipitated calcium carbonate, diatomaceous earth, barytes, aluminum trihydrate, pyrogenic silica, titanium dioxide and mixtures thereof.

44. (Added) The method of claim 41 wherein said hydrophobic outer surface materials are selected from the group consisting of organic titanates, organic zirconate or aluminate coupling agents, organofunctional silanes, modified silicone fluids and fatty acids and salts thereof.

45. (Added) The method of claim 38 wherein the horticultural crop is selected from the group consisting of fruits, vegetables, trees, flowers, grasses, roots, seeds and landscape and ornamental plants.

46. (Added) The method of claim 41 wherein the hydrophilic core particulate materials are selected from the group consisting of calcium carbonate, calcined kaolin and mixtures thereof.

47. (Added) The method of claim 40 wherein the hydrophilic particulate materials are selected from the group consisting of calcium carbonate, calcined kaolin and mixtures thereof.

48. (Added) A method for enhancing the photosynthesis of horticultural crops which comprises applying to the surface of said horticultural crop an effective amount of one or more highly reflective particulate materials, said particulate materials being finely divided, and wherein the particles as applied allow for the exchange of gases on the surface of said crop and the particulate materials comprise a hydrophilic core and a hydrophobic outer surface.

49. (Added) The method of claim 48 wherein said hydrophilic core materials are selected from the group consisting of calcium carbonate, mica, kaolin, bentonite, clays, pyrophyllite, silica, feldspar, sand, quartz, chalk, limestone, diatomaceous earth, baryte, aluminum trihydrate, titanium dioxide and mixtures thereof.

50. (Added) The method of claim 48 wherein said hydrophobic outer surface materials are selected from the group consisting of organic titanates, organic